

LISTING OF CLAIMS

This listing of the claims will replace all prior versions and listings of the claims:

Claims 1-49 (Cancelled)

50. (Currently Amended) A cardiac tissue ablation apparatus comprising:

first and second jaws, the jaws being relatively moveable between open and closed positions, respectively, to receive and compress cardiac tissue therebetween; each jaw having a clamping surface with a width and an elongated electrically conductive member for ablating tissue between the jaws, the conductive members of the jaws being in face-to-face relation and connectible to a bipolar energy power source so as to be of opposite polarity when so connected for providing an electrical current through a selected tissue ablation area that is located between the jaws, the conductive members each having a tissue contacting portion, which portion has a width that is less than the width of the clamping surface of its associated jaw to contact at least a portion of the selected ablation area; and

said apparatus further comprising at least one temperature sensor associated with at least one jaw and disposed to sense the temperature of cardiac tissue at a location laterally spaced from the tissue contacting portions of the conductive members, such that the temperature sensor can detect undesired thermal spread in the compressed tissue that is located outside of the selected ablation area.

51. (Currently Amended) The apparatus of claim 50 wherein said temperature sensor is disposed at a location on the respective jaw between an edge ~~exterior surface~~ of the jaw and the tissue contacting portion of the respective conductive member.

52. (Previously Presented) The apparatus of claim 50 wherein said temperature sensor is disposed proximal to the conductive member and is electrically isolated therefrom.

53. (Previously Presented) The apparatus of claim 50 wherein said temperature sensor is supported by one of the jaws.

54. (Previously Presented) The apparatus of claim 50 wherein each tissue contacting portion has a width that is less than or equal to about one-third the width of the associated clamping surface.

55. (Previously Presented) The apparatus of claim 50 wherein the conductive members are between approximately 3 to 8 cm in length and said portion of the conductive members is between approximately 0.12 to 0.6 mm in width.

56. (Previously Presented) The apparatus of claim 50 wherein each conductive member is generally centrally located relative to the associated clamping surface.

57. (Previously Presented) The apparatus of claim 50 in which at least one of the conductive members defines an interior lumen.

58. (Previously Presented) The apparatus of claim 50 in which a portion of the clamping surface is disposed on each side of the conductive member.

Claims 59-66 (Cancelled)